



prof. Ing. Nad'á Rapantová, CSc.

Born in 1962, graduated at the University of Mining and Metallurgy of Ostrava in 1985 in the field of Mining Geology (M.Sc.) and Geology of Deposits and Applied Geophysics (Ph.D.). In 2018, she was appointed professor. Supervisor of over 40 Bc and Master thesis, Supervisor of 4 successful Ph.D. graduates, recently supervisor of 5 Ph.D. students.

She is recently working at the Faculty of Civil Engineering of VSB – Technical University of Ostrava, Czech Republic. She is focused on numerical modelling of groundwater flow, transport of mass and heat especially in mining applications.

Expert activities:

She was involved in 16 national research projects (GAČR, TAČR, MPO, ČBÚ), 7 international projects, and is co-author of 33 final research reports. She has recently been involved in the projects dealing with abandonment of uranium and coal mines, predictions on impacts of deep radioactive waste disposal, utilization of shallow geothermal energy and geosequestration of CO₂.

As an Expert of International Atomic Energy Agency she is a co-author of IAEA Publication (An International Peer Review of the Rata's Site Evaluation Programme for Near-surface Disposal of Radioactive Waste in Lithuania, IAEA-LIT 79 pp, Publisher 2007), she took part in the IAEA Expert Missions (Uranium Production Site Appraisal Team – Caetité Mine INB Brasil, 2010; Review of long term care activities at former uranium mining site Pecs, Hungary, 2010) and she taught in IAEA training courses (e.g. Algier in 2011 and Tallin in 2012). Except IAEA she is an Evaluator of European projects (FP7-ENV-2013 WATER – INNO DEMO), Reviewer of journals (*IF (Science citation Index Expanded) Journal of Earth System Science, Hydrogeology Journal, Journal Mine Water and the Environment. Environmental Earth Sciences, Quarterly Journal of Hydrogeology and Engineering Geology, Water SA, journal Applied Energy etc.*) and Expert of European Commission EC TAIX (Technical Assistance Information Exchange Instrument) – 8 missions in Bulgaria 2006, Poland 2006, Lithuania 2006, Latvia 2006, Croatia 2007, Estonia, Turkey 2007, Hungary 2008.

Since 2008 Member of Executive Council of International Mine Water Association, since 2009 vice-chair of Czech Association of Hydrogeologists, since 2016 secretary of Czech Chapter of International Association of Hydrogeologists.

She is an author or co-author of 111 publications in journals and conference proceedings – 72 publications abroad, coauthor of 4 monographs (2 abroad), 21 publications in database Web of Science, 13 publications in Scopus, and 54 publications in Google Scholar.

Selected publications:

Rapantova, N.; Pospisil, P.; Koziorek, J.; Vojcinak, P.; Grycz, D.; Rozehnal, Z. (2016): Optimisation of experimental operation of borehole thermal energy storage. *Applied Energy* 181:464 - 476 · November 2016. DOI: 10.1016/j.apenergy.2016.08.091.

Rapantova, N.; Licbinska, M.; Babka, O.; Grmela, A.; Pospisil, P (2013): Impact of uranium mines closure and abandonment on groundwater quality. *Environmental Science and Pollution Research*, 2013, vol. 20, no 11, pp. 7590-7602.

Yousuf, M.A.; Rapantova, N.; Younis, J.H. (2018): Sustainable water management in Iraq (Kurdistan) as a challenge for governmental responsibility *Water (Switzerland)*, 10 (11).

Rapantova, N.; Krzeszowski, S.; Grmela, A.; Wolkersdorfer, C. (2012): Quantitative Assessment of Mine Water Sources Based on the General Mixing Equation and Multivariate Statistics. *Mine Water and the Environment*, Volume 31, Issue 4, pp. 252-265.

Matlochová, A.; Plachá, D.; Rapantová, N. (2013): The application of nanoscale materials in groundwater remediation. *Polish Journal of Environmental Studies.*, vol. 22, no 5, pp. 1401-1410.

Rapantová, N.; Grmela, A.; Vojtek, D.; Halir, J.; Michalek, B. (2007): Groundwater flow modelling applications in mining hydrogeology, *Journal Mine Water and the Environment*. Springer-Verlag ISSN 1025-9112, pp.264-271.